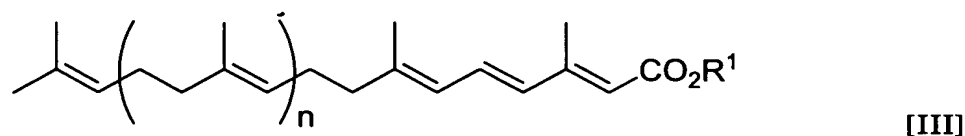


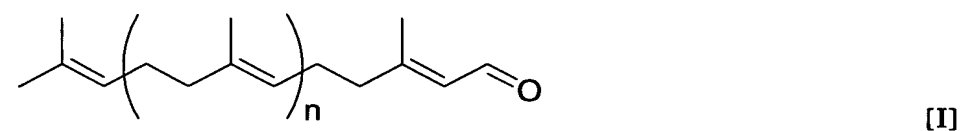
What is claimed is:

1. A method for preparing a polyprenyl compound represented by the following general formula [III]:



[wherein n represents an integer of from 0 to 3, and R<sup>1</sup> represents a group consisting of hydrocarbon]

which is characterized in that an aldehyde represented by the following general formula [I]:

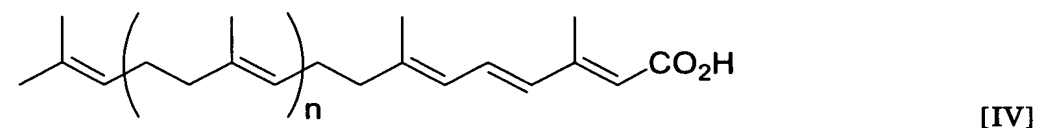


[wherein n has the same meaning as defined in [III]] and a Wittig reagent represented by the following general formula [II]:



[wherein each of R<sup>1</sup> and R<sup>2</sup> represents a group consisting of hydrocarbon] are reacted in a medium as a mixture of water and an organic solvent in the presence of a base, and further in the presence of a crown ether.

2. A method for preparing a polyprenyl compound represented by the following general formula [IV]:



[wherein n has the same meaning as that defined in the aforementioned general formula [III]]

which is characterized in that the aldehyde represented by the aforementioned general formula [I] and the Wittig reagent represented by the aforementioned general formula [II] are reacted in a medium as a mixture of water and an organic solvent in the presence of a base, and further in the presence of a crown ether to obtain the compound represented by the aforementioned general formula [III], and then the compound represented by the aforementioned general formula [III] is subjected to a hydrolysis reaction in the presence of a base.

3. The method according to claim 1, wherein the crown ether is 15-crown-5, 18-crown-6, 1-aza-15-crown-5, 1-aza-18-crown-6, benzo-15-crown-5, benzo-18-crown-6, or dibenzo-18-crown-6.

4. The method according to claim 1, wherein the crown ether is 15-crown-5, 18-crown-6.

5. The method according to claim 1, wherein the crown ether is 15-crown-5.

6. The method according to claim 1, wherein the Wittig reagent represented by [II] is triethyl-3-methyl-4-phosphonocrotonate.

7. The method according to claim 1, wherein the aldehyde represented by [I] is (2E,6E)-3,7,11-trimethyl-2,6,10-dodecatrien-1-al.

8. The method according to claim 1, wherein the crown ether is 15-crown-5, 18-crown-6 and the aldehyde represented by [I] is (2E,6E)-3,7,11-trimethyl-2,6,10-dodecatrien-1-al.

9. The method according to claim 2, wherein the crown ether is 15-crown-5, 18-crown-6, 1-aza-15-crown-5, 1-aza-18-crown-6, benzo-15-crown-5, benzo-18-crown-6, or dibenzo-18-crown-6.

10. The method according to claim 2, wherein the crown ether is 15-crown-5, 18-crown-6.

11. The method according to claim 2, wherein the crown ether is 15-crown-5.

12. The method according to claim 2, wherein the Wittig reagent represented by [II] is triethyl-3-methyl-4-phosphonocrotonate

13. The method according to claim 2, wherein the aldehyde represented by [I] is (2E,6E)-3,7,11-trimethyl-2,6,10-dodecatrien-1-al.

14. The method according to claim 2, wherein the crown ether is 15-crown-5, 18-crown-6 and the aldehyde represented by [I] is (2E,6E)-3,7,11-trimethyl-2,6,10-dodecatrien-1-al.